

REMARKS

Claims 1-15 remain pending in the application.

Claims 1-15 over Havinis in view of Lam

Claims 1-15 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,219,557 to Havinis in view of U.S. Patent Application Publication No. 2003/0072318 to Lam et al. ("Lam"). The Applicant respectfully traverses the rejection.

Claims 1-15 recite establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager via an intermediary home Location Services (H-LCS) manager associated with the wireless device.

The Examiner alleged that Havinis discloses establishing a roaming interface for a wireless device in Figures 4 and 5, and their respective descriptions (see Office Action, page 2). However, Havinis' teaches use of a new LCS transaction type in a Connection Management(CM) sub-layer of General Packet Radio Service (GPRS) in the Serving GPRS Support Node (SGSN) and a GPRS Mobile Station (MS) to handle request for Location Service (LCS) in parallel to other offered services (see Havinis, col. 3, lines 23-28). Thus, Havinis' invention is directed toward a new LCS transaction type not disclosed as having any application to a wireless device while it is roaming, much less establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, as recited by claims 1-15.

Moreover, since as discussed above Havinis fails to disclose any application to a wireless device while it is roaming, Havinis fails to disclose a visited location service (V-LCS) manager. The Examiner alleged that Havinis discloses a visited location service (V-LCS) manager at item 270. However, Havinis specifically discloses item 270 is a Mobile Location Center (MLC). Havinis fails to disclose the MLC has anything to do a visited network, i.e, while a wireless device is roaming. Thus, Havinis fails to disclose establishing a roaming interface between a wireless device and a visited location service (V-LCS)

manager, much less via an intermediary home Location Services (H-LCS) manager, as recited by claims 1-15.

Havinis's patent basically teaches a method to allow a GPRS network to establish "special" GPRS PDP context (i.e. IP connectivity) for LCS service, in which he assumes the overall system (i.e. control plane, including the GPRS radio protocol stack, see the protocol architecture below) knows the service request is for LCS service. This is fine for Control Plane based location services, but it is not a valid assumption for User Plane based location services. Havinis' patent was written at a time when GMLC, only one associated with a specific mobile station, is responsible for retrieving location for all the location requests targeting the mobile station. In contrast to Havinis, Applicants' claimed features are drawn to a novel roaming concept, i.e., when roaming only the local visited GMLC can provide location services, the H-GMLC has to go through the V-GMLC, and the interface between H-GMLC and V-GMLC will be IP based. Due to these differences, Havinis lacks any relevance to Applicant's claimed features.

The Examiner relied on Lam to allegedly make up for the serious deficiencies in Havinis to arrive at the claimed features. The Applicants respectfully disagree.

The Examiner alleged that Lam teaches "that it is well known to use firewalls between home carrier networks and visited carrier networks." (see Office Action, page 3). Lam discloses in paragraph [0019] that the "SGSN 115 also maintains location information relating to MN 105." Lam only describes a single component containing location information, the SGSN. Lam's patent is directed toward optimizing the routing and QoS control for IP traffic of GPRS PDP context (IP link), with no teachings of how the IP traffic (e.g. User Plane LCS traffic) can be routed back to a visited network from a Home network. Lam fails to teach any application to a wireless device while it is roaming, i.e., a visited carrier network. Lam fails to disclose fails to disclose two location managers, establishing a roaming interface between a wireless device and a visited location

service (V-LCS) manager, much less via an intermediary home Location Services (H-LCS) manager, as recited by claims 1-15.

Havinis in view of Lam, either alone or in combination, would still fail to disclose, teach or suggest establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager, much less via an intermediary home Location Services (H-LCS) manager, as recited by claims 1-15.

Moreover, claims 1-10 recite directing IP connectivity over a roaming interface between a home LCS manager and a visited LCS manager through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network.

The Examiner alleged that Lam teaches “that it is well known to use firewalls between home carrier networks and visited carrier networks.” (see Office Action, page 3). However, Lam fails to teach any application to a wireless device while it is roaming, i.e., a visited carrier networks.

As discussed above, Lam only describes a single component containing location information, the SGSN. Lam fails to disclose two location managers, much less directing information between two location managers through two firewalls, i.e., directing IP connectivity over a roaming interface between a home LCS manager and a visited LCS manager through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network, as recited by claims 1-10.

Thus, Havinis in view of Lam, either alone or in combination, still fails to disclose, teach or suggest establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager via an intermediary home Location Services (H-LCS) manager associated with the wireless device, and directing IP connectivity over a roaming interface between a home LCS manager and a visited LCS manager through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network, as recited by claims 1-10.

Moreover, the reason that Havinis fails to disclose the acknowledged deficiency is that Havinis' invention lacks any application to firewalled networks. The Examiner must first provide motivation why Havinis would be modified with two firewalls **AND** IP connectivity. The Examiner has failed to provide motivation why Havinis would be modified to include two firewalls **OR** IP connectivity, much less two firewalls **AND** IP connectivity, i.e., to direct IP connectivity through two firewalls, much less through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network. Havinis fails to disclose, teach or suggest any need for two firewalls **AND** IP connectivity with the context of his invention.

Claims 11-15 recite a message tunneling mechanism is formed between a visited location service (V-LCS) manager and a wireless device being located.

As discussed above, neither Havinis nor Lam have any application to a wireless device while it is roaming, much less disclose visited location service (V-LCS) manager. Thus, Havinis and Lam fail to disclose a a message tunneling mechanism is formed between a visited location service (V-LCS) manager and a wireless device being located, as recited by claims 1-15.

Thus, Havinis in view of Lam, either alone or in combination, fails to disclose, teach or suggest establishing a roaming interface between a wireless device and a visited location service (V-LCS) manager via an intermediary home Location Services (H-LCS) manager associated with the wireless device; and a message tunneling mechanism is formed between a visited location service (V-LCS) manager and a wireless device being located, as recited by claims 11-15.

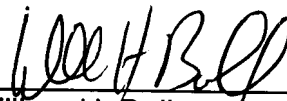
Moreover, the Examiner acknowledged that Havinis fails to "teach directing IP connectivity over the internet capable of being transmitted through a firewall in a home wireless carrier network and through a firewall in a visited wireless carrier network." (see Office Action, and 3) for claim 11. However, claim 11 does **NOT** to recite reliance on a firewall. Thus, the Examiner's reliance on Lam to disclose a firewall is **misdirected**.

For at least these reasons, claims 1-15 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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